CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

[redacted] sketch of Zavod 659 (see page 7) on which the following are shown:

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Point 1 Administration building

This building was four stories high. The following were located on the first floor: kitchen, employees' cafeteria, dispensary, main entrance, time clock, tool and gauge storage room, and a repair shop for measuring instruments. The second floor included a conference room and the offices of the main dispatcher, job assignment and finance administrators, and the offices of the bookkeeping, transportation, and purchasing departments. The following were located on the third floor: the secret record file, the offices of the Party headquarters, the chief engineer, the technical information service, the department of the chief designer, the mail room, and three drafting rooms. The fourth floor of the administration building housed the offices of the centrally controlled radio, the photographic department, the reproduction department, timekeeper and paymaster, cashier and head bookkeeper, and a storage room which was used by the drafting department.

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(Note: Washington Distribution Indicated By "X"; Field Distribution By "#".)

Point 2 Large hall

This hall was three stories high; in it electric generators and motors of medium capacity (chiefly between 1000 and 5000 KVA, but up to approximately 20, 000 KVA) were assembled. The hall was equipped with the following large machines: two-to six-meter lathes, a one-to six-meter planing machine, two vertical drill presses which were three meters high, four mechanical shears, and three power presses (capacity up to two tons). The remaining space in this hall was used as an assembly room for the insertion of field and armature windings and testing of small machinery.

Point 3 Building containing the following shops:

Approximately 30 small parts punches were located in the punch press shop. There were also 10 medium punches for hot parts, and five chamber furnaces (Kammergluehoefen) (100 x 60 x 60 cm.). The following equipment was included in the collector construction shop: two chamber furnaces, two cold saws for copper, and small machinery. The experimental testing shop included: about eight medium lathes (up to three meters), three milling machines, three shaping machines, five drill presses, a mechanical shear; and work benches were located in the testing section of the punch press shop.

Another section of this shop, the automatic turning and drawing section, was equipped with the following: about 15 automatic and turret lathes, three drawing benches for copper profiles, work benches, and small machinery.

The oil switch construction section contained: an assembly line having a capacity of 1500 oil switches per month. On a similar assembly line the same number of circuit breakers was produced per month. The most frequently constructed type of oil switch was for 10 kv,200 amp., and 400 MVA breaking capacity.

The shop which was engaged in oil switch construction contained: three vertical boring mills, one meter in diameter, about 10 lathes up to 3 meters in length, surface and round grinding machines, milling machines, and other small machinery. Most of the transformers constructed in this building had a capacity of 500 KVA, although the maximum capacity was up to 1000 KVA. The transformer construction equipment included four mechanical shears, one machine for pasting paper on transformer sheets, and approximately 10 winding benches (up to one meter in diameter).

Tool-producing shop 1 was also located in this building, and included the following: approximately 20 lathes up to three meters, 10 milling machines, four grinding machines for round and surface grinding, shaping machines, small machinery, and work benches.

Point 4. Two-story building

A driveway led to the packing room. The first floor contained a storage room for circuit breaker and oil switch parts, the oil preparation room, three boilers for transformer and oil switch oil; a galvanizing department with 10 vats for cadmium, nickel, and copper, a pickling plant, a sandblasting section, and an impregnating shop with three soaking basins and drying furnaces for transformer winding. Tool-producing shop II was also located on this floor, and was equipped with two large jig drills, smaller machinery, and work benches.

Three laboratories were located on the second floor of this building--the laboratory for mechanical switch tests, the laboratory for current transformers, and the laboratory for chemical analysis. The size of the laboratory for current transformers was greatly reduced in 1951 when current transformer production was transferred to a small plant located in the center of town; this small plant did not belong to Zavod 659. Following this transfer, the laboratory for current transformers at Zavod 659 was only engaged in testing the bushing-type transformers of oil switches. The laboratory for analysis was engaged in analyzing materials that were being used in the manufacturing processes and included a laboratory shop, a laboratory for thermal testing of electrical apparatus, and an office which housed the chemical analysis laboratory administration.

Point 5. Large bi-partitioned hall

This hall was two stories high. Forgings, oil switch tanks, transformer tanks, frames for electrical machinery, and similar large parts were being manufactured here. The hall was equipped with 10 large mechanical shears, binding and folding machines, automatic welding machines, forges, and a hardening shop.

Point 6. Boiler house for central heating system

The steam generating plant which furnished superheated steam for the presses and heat for the buildings was located here.

Point 7. Two-story building

A wood pattern shop was located on the first floor, and a material-testing laboratory which was equipped with impact-type tensile-testing machines was located on the second floor.

Point 8. Two-story building

An old foundry. Cast iron, brass, aluminum, and bronze for use in the plant were cast here.

Point 9. Barracks and carpenter shop

The carpenter shop contained two planing machines, two milling machines, circular and band saws, and work benches.

Point 10 Fire department

The fire department was housed in a two-story building. The fire brigade, which was organized in a military manner, would constitute about one company of soldiers. The members of the fire department were always armed; the fire fighting equipment included three motorized fire engines.

Point 11 One-story building

Electrolytic copper was stored within this building.

Point 12 Two-story building

This building was constructed of corrugated sheet steel. It was used as a storage space for finished products.

Point 13 Barracks

One story high. Incoming material was stored in these barracks.

Point 14 Central electric power distributing station for Zavod 659

This building was two stories high. The station was supplied by two 35-KV cables connected with the Sverdlovsk power circuit. I estimate the entire power capacity to have been approximately 10,000 KVA. The station contained two main transformers--35-36 KV, each 5000 KVA. Distribution of power within the p nt was made by 6-KV individual transformers located in the buildings. The switch for the main station was located outdoors. This was the most vulnerable spot of the entire plant.

Point 15 Small building

Oxygen for gas welding was made here in a manner similar to the Linde process.

Point 16 Barracks-like workshop (called "Sha-obraznyy Korpus" -- the W-shaped building)

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The sections being used contained the repair shop for the electrical plant installations, and part of the circuit-breaker assembly. This building was to be vacated by 1954.

Poknt 17 New foundry

The iron skeleton framework and the large center hall (with two side halls) were under construction in 1952. I believe this new foundry will probably be completed in 1953.

Point 18 Large transformer construction site

25X1 [redacted] the iron skeleton framework and the large center hall with two side halls were under construction; the brickwork had almost been completed. Construction probably will not be completed before 1954. Transformers of all sizes were to be produced here.

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Point 19 Heavy machinery construction shop

This shop, which had an iron skeleton framework, included a large center hall and one side hall. It was completed by the end of 1951. Some of the production previously carried on in the large hall [Point 2] was transferred here when this shop was completed. The production program (for electrical machinery) was thereafter increased, and the shop was equipped with the following: special heavy machine tools; five vertical boring mills, diameter up to six meters; one larg lathe, length to be turned - 12 m; several lathes, length to b turned - up to six meters; three horizontal boring mills, about 50 smaller lathes; drill presses, milling machines, and planers The heavy machines were very old, about 1930 models, and most of them were of German or English origin.

Point 19a Iron skeleton framework of large center hall and side hall

This was an extension of the shop described above [Point 19]. These were under construction as of mid-1952, at which time the iron girders for the skeleton framework were being set up. It was expected that construction was to be completed in 1954.

Point 20 Two-story building

This building contained the following: a winding shop for small transformers, about 15 winding machines, plastics pressing shop with about six pressing machines, three edge-wise winding machines for ribbon copper, an insulating, plate-pressing machine, insulation-compounding installation for winding insulation, and a soaking and drying installation. Inflammable materials such as paper and cotton were stored in this building. [redacted] this was the most important section of the plant, since the quality of the entire plant output depended on electrical insulation. Offices were located across one end of the building on the east side.

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Point 21 Department for mercury-vapor rectifiers

This department was housed in a two-story building; the offices were located across one end. The southern half of this building contained mechanical workshops, about 12 lathes (up to 2.5 m.), three vertical boring mills (diameter-one meter), four milling machines, two shaping machines, two bending machines, two rolling machines, gas and electric arc-welding installations (Langmuir's atomic hydrogen apparatus--General Electric--1946-47), sandblasting equipment, and a porcelain grinding shop. The northern half of this building included installations for the assembly of rectifiers in special housing, mounting of switchbanks, mercury purification, and formation booths for rectifiers. A testing room was located here which was equipped with two motor-generators, capacity 1500 KW each, and four test stands for rectifiers.

Point 22 Construction shed

Point 23 Proposed location of central laboratories

In conversation with BERUKOV, Chief of Technical Information Service, I learned that it was planned that construction of these laboratories was to be in 1953-54. This was to be the final building of the plant; construction of other buildings was not planned.

Point 24 Storage shed

Less important materials and World War II plunder were stored here.

Point 25 Barracks which housed plant security office

The security officer and commander of the guard were located here. The commander of the guard was subordinate to the MVD--not the director of Zavod 659.

Point 26 Personnel and employment office

Housed in barracks which were to be replaced by stone structures. Employees were hired and discharged in this office.

Points 27a and 27b Gatekeepers' huts

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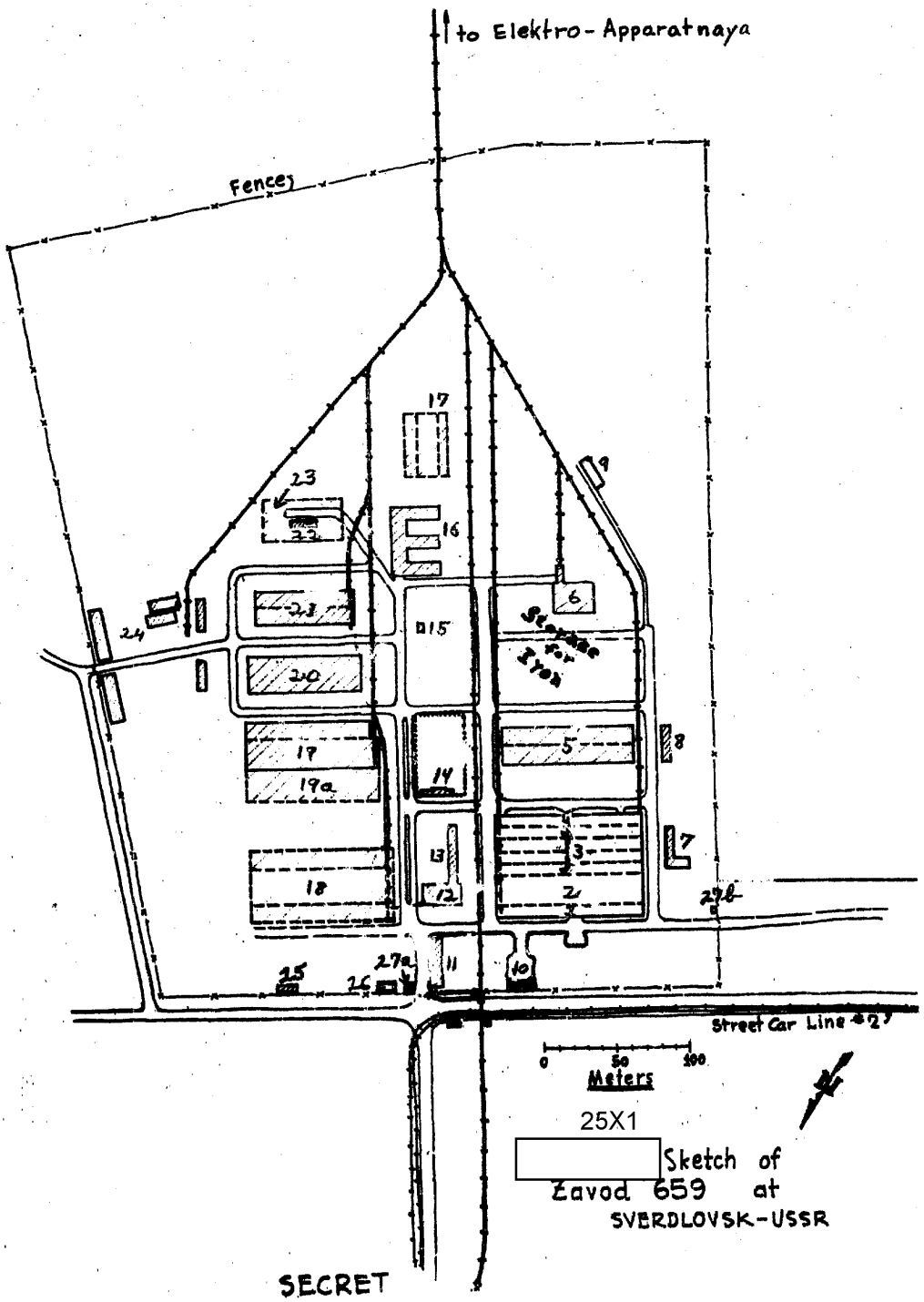

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Sketch of Zavod 659 at SVERDLOVSK-USSR

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